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(58) Field of search

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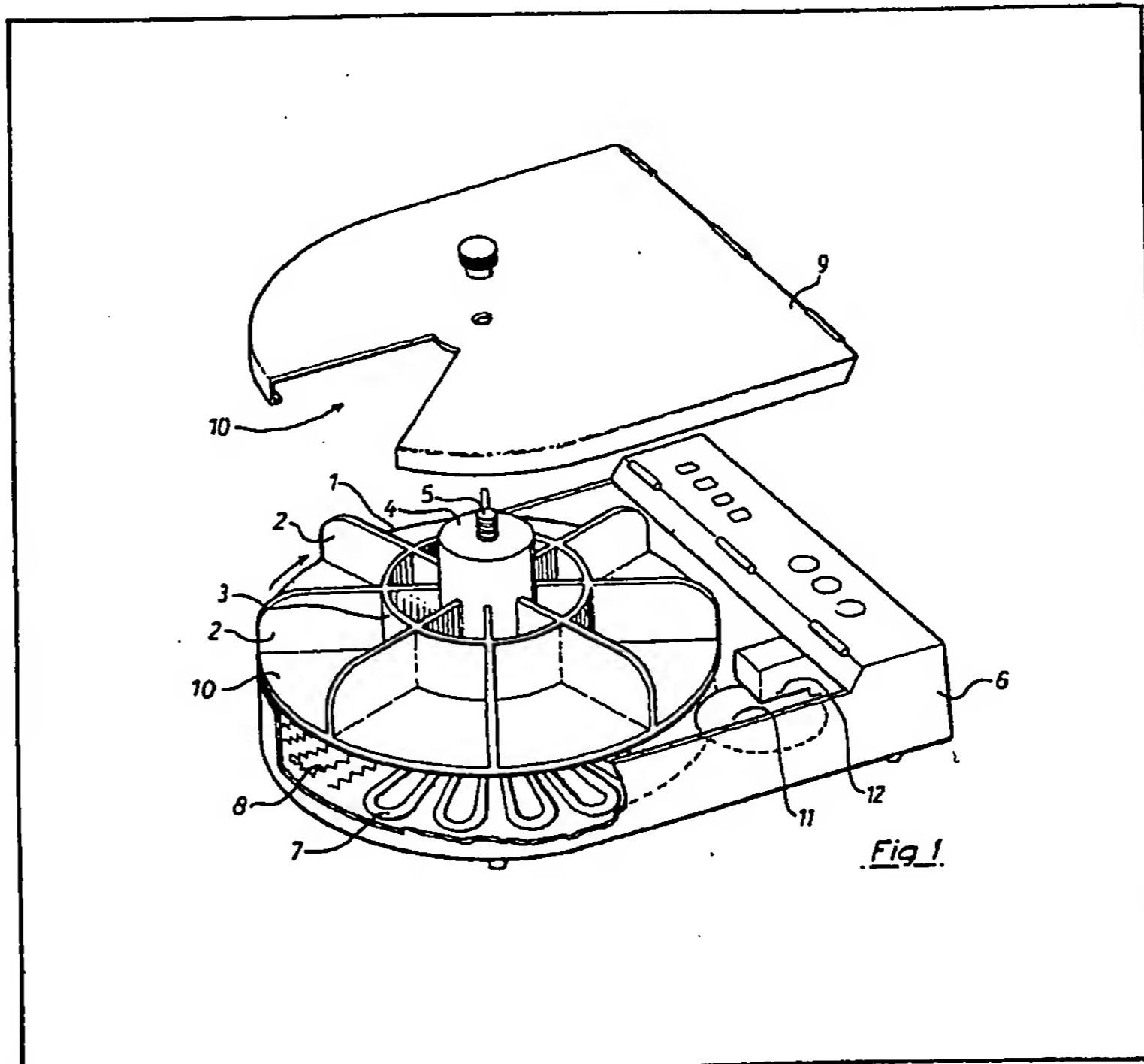
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(54) Programmable pet feeding appliance

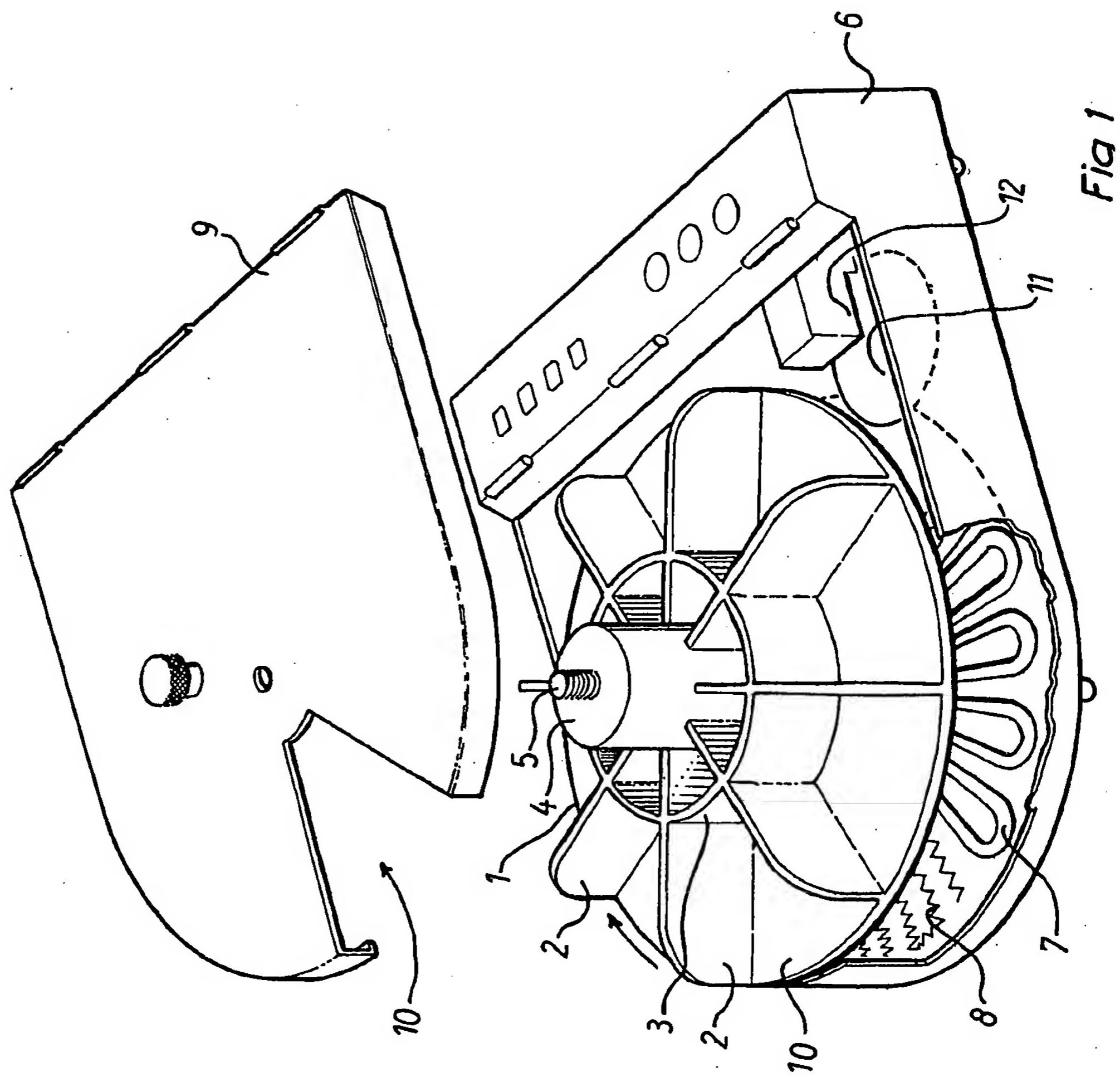
(57) The appliance comprises a compartmented member (1) rotatable about a vertical shaft (5) and a lid (9) to cover the compartments except at one radial position at which a meal contained in a compartment is presented to the pet. The member (1) is rotated under control of a conventional timer and programmer contained in the casing (6) to bring each compartment in turn to the feed station at predetermined intervals, say 24 hours. Beneath member 1 are refrigeration coils (7) to refrigerate a compartment when not at the feed station, and heating resistors (8) which heat a compartment as it is being displaced to the feed station.



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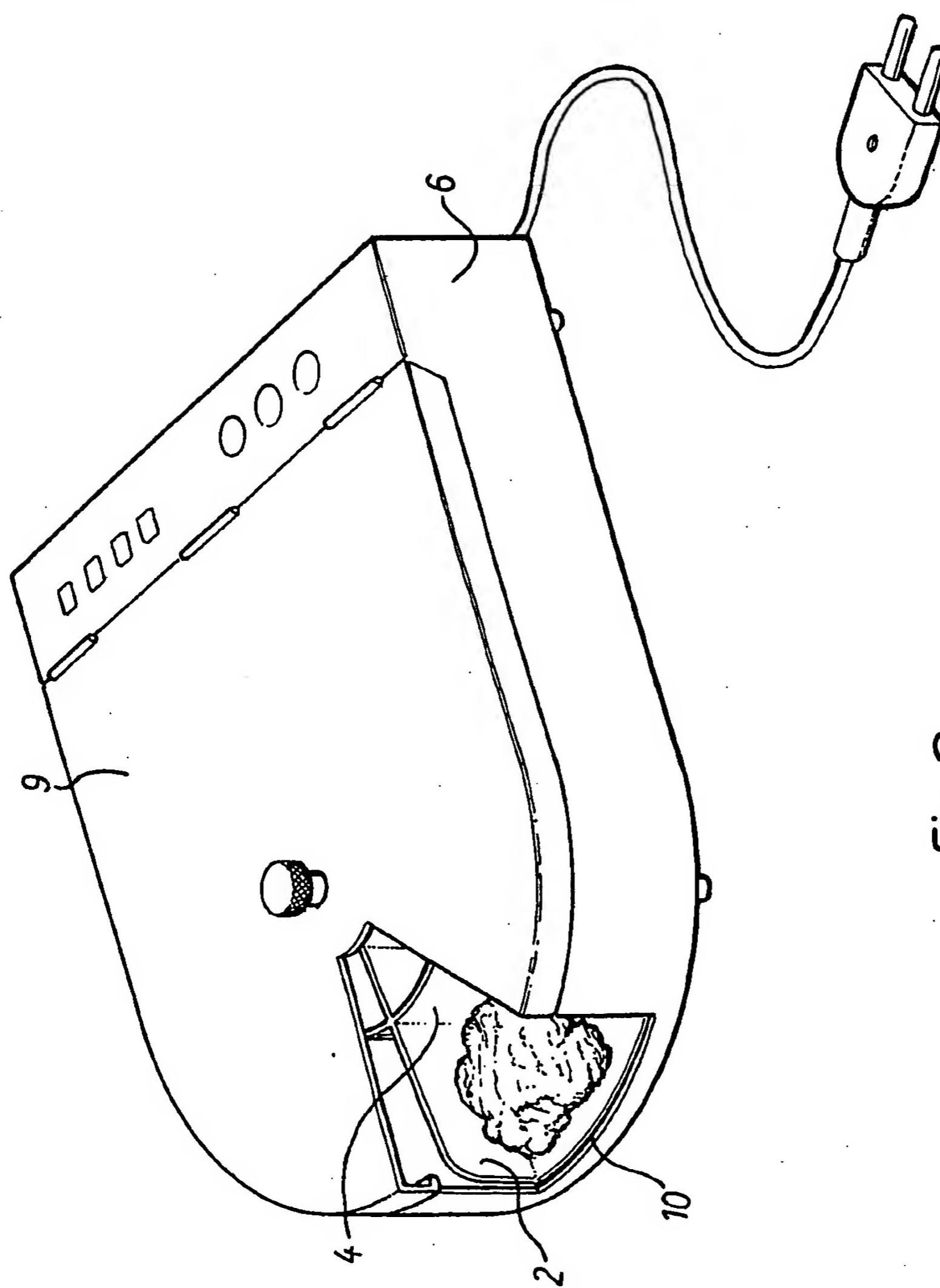


Fig. 2.

SPECIFICATION

Programmable pet feeding appliance

- 5 The present invention relates to an appliance for feeding pets (dogs, cats, etc.) in the absence of the owner.
- 10 There is provided by the present invention an appliance for feeding pets, the appliance comprising a plurality of covered meal containers, each displaceable to a feed station at which the appliance is formed to provide access for the pet to a container stationed thereat, the appliance further comprising means to effect displacement in turn of the containers to the feed station and programming means to control the displacement means to effect displacement of the containers at predetermined intervals.
- 15 Preferably the appliance comprises refrigeration means to refrigerate the containers when not at the feed station, and also feeding means operable by the programming means to heat the refrigerated meal in a container as it is being displaced to the feed station.
- The present invention will now be further described with reference to the accompanying drawings, in which:-
- 20 Fig. 1 shows an appliance according to the invention in an open view, displaying its component parts.
- 25 Fig. 2 shows the appliance assembled.
- 30 By referring to Fig. 1 it may be seen that the appliance is composed of an outer cylinder 1 which is divided into a certain number of sections separated by partitions 2 which hold the portions of food and an inner cylinder 3 for holding water, also
- 35 divided into sections.
- This cylinder fits onto a hub 4 which is fitted on to an axle 5 attached to a body 6 which contains the timing and rotation mechanism.
- The lower part of the body contains the refrigeration coil 7 and the resistors for the reheating system 8.
- 40 The lid 9 modelled to fit onto the cylinder, closes off the upper part, leaving open one single section which corresponds to the feeding position 10.
- 45 The transmission will effect the rotation of the cylinder by means of a small motor, the operation of which will be regulated by a timer and programmer, which may be of a known kind.
- 50 It can be seen in Fig. 1, that the appliance is designed to furnish seven meals, let us suppose at intervals of 24 hours in as much that the cylinder is divided into seven sections plus that which corresponds to the feeding station.
- 55 After removing or lifting the lid, the seven sections of the outer cylinder are loaded with food from the top and the inner cylinder is filled with water. The appliance is now ready for use.
- 60 All that must be done is to plug it in to an ordinary outlet and turn on the refrigeration device which conserves the food at the right temperature.
- Having programmed the dispensing of food to occur every 24 hours, at the end of the interval the

- motor will be operated and will rotate the cylinder an eighth of a turn in order to bring the immediately preceding section into position for feeding.
- 65 Before this rotation is completed, the resistors will be fed for an appropriate time period in order to heat the food to the best temperature.
- 70 After 24 hours the cylinder will complete another eighth of a turn bringing the next section into position after passing through the heating phase described above; this process will continue until the last section is brought into place.
- In this way the pet will be furnished with food and
- 75 water for seven days according to a regular schedule, thus avoiding the problem that arises when the pet is left by itself with a certain quantity of food on which it immediately gorges itself and then is left for the remainder of the owner's absence with nothing to eat.
- The food is kept under refrigeration and so is not subject to spoilage which could cause damage to the pet's health and unpleasant odours in the house.
- The water is kept in a separate cylinder also
- 80 divided into sections so that it is completely separate from the food.
- The appliance shown in the attached diagram has been designed for seven days of feedings, but it presents only one possible application of the principle:
- 85 it is obvious that by increasing or decreasing the number of sections, it is possible to make an appliance designed to dispense food for a longer or shorter period of time.
- 90 As illustrated the appliance is designed using a vertical axis, but this does not exclude the possibility of producing an analogous appliance on a horizontal axis with the dishes especially modelled and fitted so that they are perfectly stabilized, on the principle of the "Ferris Wheel".
- 95 In this embodiment, the dishes themselves will be divided into two separate parts, the front part preferably reserved for food and the back part for water.
- 100 The timing and programming system may be conventional.
- 105 In one structural variation, the resistor system for the heating of the food could be substituted by a coil which directly utilizes the heat produced by the gas compressor for the refrigerator.
- 110 The construction material would preferably be cast from light alloy, cast iron and stainless steel specially treated and rust proofed to ensure its durability, but this does not exclude the usage of other materials, such as plastics, which might prove more ideal.
- 115 The input system will run on electric energy furnished by the mains through a transformer employed as a safety measure, or furnished by batteries, or both, in order to ensure the dispensing of food in the event that there should be an absence of electricity in the mains.
- 120 CLAIMS
1. An appliance for feeding pets, the appliance comprising a plurality of covered meal containers each displaceable to a feed station at which the

- appliance is formed to provide access for the pet to a container stationed thereat, the appliance further comprising means to effect displacement in turn of the containers to the feed station and programming
- 5 means to control the displacement means to effect displacement of the containers at predetermined intervals.
2. An appliance as claimed in claim 1, wherein each container is in the form of a compartment of a
- 10 rotating or sliding structure.
3. An appliance as claimed in claim 2, wherein the said structure is rotated about a vertical axis.
4. An appliance as claimed in claim 1, 2 or 3, wherein refrigeration means are provided for
- 15 refrigerating the containers and any food therein, when other than at the feed station.
5. An appliance as claimed in any preceding claim, wherein heating means are provided for heating a container as it is moved to the feed station.
- 20 6. An appliance for feeding pets substantially as hereinbefore described with reference to the accompanying drawings.

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